

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/JP2004/009495

International filing date (day/month/year)
29.06.2004

Priority date (day/month/year)
30.06.2003

International Patent Classification (IPC) or both national classification and IPC
H04Q11/00

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/009495

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/009495

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-9,11-32,34-48
	No: Claims	1,10,33
Inventive step (IS)	Yes: Claims	2-9,11-32,34-48
	No: Claims	1,10,33
Industrial applicability (IA)	Yes: Claims	1-48
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

1 The following document is referred to in this communication:

D1 : EP 0 550 046 A (GTE LABORATORIES INC) 7 July 1993 (1993-07-07)

2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

"An optical packet exchanger for switching a transmission path of an optical packet (fig. 4), comprising :

- An optical transmitter section (implicit from the packet arriving at the optical fiber shown in fig.4) for transmitting an optical packet, on which an information signal and an address signal corresponding to a transmission destination for the information signal are superposed by different modulation methods (data modulated according to col.3, lines 37-42 and superposed with subcarrier multiplexed header);
- An optical transmission section for propagating an optical packet transmitted from the optical transmitter section (fiber fig. 4); and
- A router section (fig.4, ref. 460) for receiving the optical packet via the optical transmission section, and switching a transmission path for the optical packet based on the address signal, which is extracted from the optical packet. "

Therefore claim 1 is not new.

3 INDEPENDENT CLAIM 33

3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 33 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

"A router for switching a transmission path for an optical packet (fig. 4) which constitutes a burst-type optical signal and on which an information signal and an address signal corresponding to a transmission destination for the information signal are superposed by different modulation methods (data modulated according to col.3, lines 37-42 and superposed with subcarrier multiplexed header), the router comprising :

- An optical splitter section (optical tap of fig.4) for splitting the optical packet into two optical packets;
- An address reading section (fig. 4, references 420, 430, 440) for reading the address signal based on the information of one of the optical packets output from the optical splitter section; and
- A path switching section (fig.4, ref. 460) having a plurality of output ports and selecting, based on the address signal read by the address reading section, one of the plurality of output ports from which to output the other optical packet output from the optical splitter section.

4 DEPENDENT CLAIM 10

Dependent claim 10 does not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), since the additional subject-matter is also disclosed in the abstract of D1.

5 DEPENDENT CLAIMS 2-9, 11-32, 34-48

The combination of the features of dependent claims 2-9, 11-32, 34-48 are neither known from, nor rendered obvious by, the available prior art. The reasons are as follows:

The subject matter of each of claims 2-7,31,32,34,35 discloses the packet information signal to be modulated using the address signal and the address signal to be modulated using phase modulation. This feature is considered to be new, because it is not disclosed nor hinted at by any prior art document. Because this feature also solves the problem of inefficient transmission, this feature is also considered to involve an inventive step.

Since claims 8,9,11-30,33,36-48 are dependent on one or more of the aforementioned claims, they also meet the requirements of the PCT with regards to novelty and inventive step.